



United States Government Accountability Office
Washington, DC 20548

February 7, 2013

Congressional Committees

Subject: *Launch Services New Entrant Certification Guide*

This letter formally transmits the briefing slides we provided on February 1, 2013 in response to a House report accompanying the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. No. 112-479 (2013)), which directed that we report to the congressional defense committees by February 1, 2013 with a review and analysis of the implementation of the Air Force Launch Services New Entrant Certification Guide (Guide). In 2011, the Air Force, National Aeronautics and Space Administration (NASA), and National Reconnaissance Office (NRO), implemented a coordinated strategy to certify new entrants to provide launch capability on Evolved Expendable Launch Vehicle (EELV)-class launch vehicles. New entrants are launch companies that are working toward certifying their launch vehicle capabilities so that they may be allowed to compete with the current sole-source contractor for government launches. Launch vehicle certification is necessary to ensure that only proven, reliable launch vehicles will be used to launch government satellites. Currently only one provider is certified to provide EELV-class launch capability for government launches. To execute this strategy for national security space launches, the Air Force developed the Guide, which serves as a risk-based approach that the Air Force's Space and Missile Systems Center is using to certify the launch vehicle capabilities of potential new entrant launch providers. In response to the mandate, we addressed: (1) How the Air Force plans to implement its New Entrant Certification Guide, and (2) New entrant perspectives on becoming certified under the New Entrant Certification Guide.

To conduct this work, we reviewed the Guide and other requirements documents, interviewed Air Force officials responsible for implementing the Guide, and spoke with all four potential new entrants identified by the Air Force to discuss their perspectives on becoming certified under the Guide. We conducted this performance audit from October 2012 to February 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In summary, the Air Force based its Guide on existing NASA policy and procedures with respect to payload risk classification and launch vehicle certification. Payloads are classified based in part on factors such as national significance, payload complexity and cost, and are

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assigned a risk tolerance level accordingly. The Air Force, NASA, and NRO are working to coordinate and share information to facilitate launch vehicle certification efforts; however, each agency will determine for itself when certification has been achieved. As a result, some duplication and overlap of efforts could occur. The Air Force has also added other prerequisites to certification for new entrants that are not captured within the Guide, such as an approved implementation plan and a cooperative research and development agreement. According to the Air Force, these agreements are legal mechanisms intended to enable data sharing between the Air Force and new entrants, while protecting the interests of both.

While potential new entrants stated that they are generally satisfied with the Air Force's efforts to implement the Guide, they identified several challenges to certification, as well as perceived advantages afforded to the incumbent launch provider. For example, new entrants stated that they face difficulty in securing enough launch opportunities to become certified. The Under Secretary of Defense for Acquisition, Technology, and Logistics recently directed the Air Force to make available up to 14 launches for competition to new entrants, provided they demonstrate the required number of successful launches and provide the associated data in time to compete. If new entrants have not completed their final certification launch in time to compete, the newly-available launches will likely be awarded to the incumbent provider. New entrants stated they must also respond to changes in Air Force requirements that could impact their launch vehicle design and certification schedules. Air Force officials noted their intent to work with new entrants that may be affected by recent changes. Additionally, new entrants consider some Air Force requirements to be overly restrictive; for example, new entrants must be able to launch a minimum of 20,000 pounds to low earth orbit from specific Air Force launch facilities (versus facilities the new entrants currently use.) The Air Force stated that 20,000 pounds represents the low end of current EELV lift requirements, and that alternate launch sites are not equipped for the Air Force's national security launches. Further, new entrants noted that the incumbent provider receives ongoing infrastructure and development funding from the government, an advantage not afforded to the new entrants, and that historical criteria for competition in the EELV program were more lenient. The Air Force acknowledged that criteria for competition are different, reflective of differences in the acquisition environment. For additional information on the results of our work, see enclosure I: Briefing on the Air Force's Launch Services New Entrant Certification Guide.

In commenting on a draft of this report, the Department of Defense (DOD) raised a concern that we erroneously stated that DOD used a different certification standard for the incumbent provider than will be applied to new entrants. However, the slide in question (page 22 of this report) was correct as it reflects the new entrant perception that the criteria for competition, not certification, were more lenient for the incumbent provider. As a result, no change was made in response to this comment. DOD also provided other technical comments which were incorporated as appropriate. DOD's comments are reproduced in enclosure II: Comments from the Department of Defense.

We are sending copies of this report to the appropriate congressional committees. We are also sending copies to the Secretary of Defense, the Secretary of the Air Force, the NASA Administrator, and the Director of the NRO. This report will also be available at no charge on our website at <http://www.gao.gov>. Should you or your staff have questions concerning this report, please contact me at (202) 512-4841 or on chaplainc@gao.gov.

Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report were Art Gallegos, Assistant Director; Pete Anderson, Nabajyoti Barkakati, Claire Buck, Desiree Cunningham, John Krump, Brian Lepore, Carrie Rogers, Mike Shanahan, and Hai Tran.



Cristina Chaplain
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Enclosures - 2

List of Committees

The Honorable Carl Levin
Chairman
The Honorable James Inhofe
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Chairman
The Honorable Ranking Member
Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Buck McKeon
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House of Representatives

The Honorable C.W. Bill Young
Chairman
The Honorable Pete Visclosky
Ranking Member
Subcommittee on Defense
Committee on Appropriations
House of Representatives



Air Force Launch Services New Entrant Certification Guide

**Briefing to the Defense Committees in response to
House Report accompanying National Defense
Authorization Act for Fiscal Year 2013 (Pub. L. No.
112-479 (2013))**

February 1, 2013

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Introduction

The Air Force is working to reintroduce competition into its Evolved Expendable Launch Vehicle (EELV) program for the first time in almost 15 years. Reasons include:

- Significant price increases for launch services
- Emergence of additional potential viable launch providers
- Desire to bolster the U.S. launch industrial base and introduce competition

In coordination with the National Aeronautics and Space Administration (NASA), and the National Reconnaissance Office (NRO), the Air Force has developed a Launch Services New Entrant Certification Guide to inform how the Air Force will certify the capability of potential new entrant launch companies to provide launch services and potentially compete for national security space (NSS) missions

Objectives

As agreed with your offices, this briefing satisfies the mandate language provided to GAO in the House Report and addresses the following questions:

- (1) How does the Air Force plan to implement its New Entrant Certification Guide?
- (2) What are new entrant perspectives on becoming certified under the New Entrant Certification Guide?

Background

- The EELV program is the primary provider of launch vehicles and capability for U.S. military and intelligence satellites. The launch vehicles used by the EELV program are also used to launch civilian and commercial satellites.
- The most recent independent cost estimate projects the program will cost close to \$70 billion through 2030.
- The EELV program started in 1995 when the Air Force awarded contracts to four companies for preliminary launch vehicle system designs; at that time, the Air Force's acquisition strategy was to select the one company with the most cost-effective design.
- Given commercial forecasts that predicted sufficient demand to support two launch vehicle providers, in 1997 the Secretary of Defense approved maintaining competition between the two top companies: Lockheed Martin, and what would become Boeing.
- Among other things, the new strategy was designed to
 - Promote competition, resulting in lower launch prices
 - Encourage contractor investment in innovative technologies

Background, cont.

- By the late 1990s, it was clear that the commercial market would not materialize, and in 2003 DOD's cost estimate for the EELV program increased by 77 percent over the previous year
- The Air Force again revised its acquisition strategy for the program, this time to add program office oversight, focus on assured access to space, and reflect the lack of commercial demand and the government's role as primary EELV customer
 - DOD, NASA, and the NRO comprise the majority of EELV business
- In 2006, the two EELV contractors formed a single company under a joint venture, called the United Launch Alliance (ULA); consolidation of their launch businesses was expected to yield between \$100 million and \$150 million in savings per year
- ULA has been successful in consolidating its operations and realizing significant savings, according to the Defense Contract Management Agency, but for various reasons, EELV program costs have continued to rise

Background, cont.

- In late 2011, the Air Force revised its acquisition strategy for the EELV program; this strategy was designed to maintain mission success, stabilize the U.S. launch industrial base, reduce launch costs, and allow competition, among other things
- For the first time since the program began, new launch providers are emerging that could eventually meet EELV requirements and compete with the heretofore sole-source EELV contractor, ULA; we reported in 2011 that such competition could potentially yield cost savings to the government
- To that end, the Air Force, NASA, and the NRO embarked on a coordinated approach to encourage new entrants to compete for EELV-class missions
 - In March 2011, the agencies signed a memorandum of understanding recognizing the need for additional launch vehicle providers
 - In early October 2011, they developed a strategy to “provide a consistent path for new entrants to compete for [U.S. government] missions,” and agreed to adopt a framework consistent with NASA’s long-standing certification criteria, contained in NASA Policy Directive 8610.7D
- In late October 2011, the Air Force issued its Launch Services New Entrant Certification Guide (NECG), informed largely by NASA’s criteria, which outlines the risk-based approach the Air Force will use to certify the capabilities of new launch companies to compete for EELV-class missions

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Objective 1

Air Force Implementation of the NECG

- The Commander of the Air Force's Space and Missile Systems Center is responsible for granting launch vehicle certification
- New entrants begin the process by issuing a Statement of Intent to certify a vehicle, which contains that vehicle's planned capabilities
- Certification can occur following approval of milestones and completion of activities outlined in the NECG; new entrants submit a formal "certification plan," which outlines the tailored certification approach through which a new entrant intends to achieve certification
- A separate certification plan and process is required for each launch vehicle configuration; additionally, if a certified launch vehicle undergoes changes that "substantially affect" certain factors outlined in the NECG, such as operating time or engine thrust profile, that vehicle must re-enter the certification process from the beginning
- Certification does not guarantee contract award

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Objective 1

Air Force Implementation of the NECG: Interagency Coordination

- The coordinated certification strategy between the Air Force, NASA, and NRO provided that the agencies would use a common framework for launch vehicle certification, based on existing NASA policies; however, the strategy allows agency interpretation and certification requirements to differ. For example, each agency may determine for itself
 - The number of launches a new entrant must complete prior to competing for contract award
 - How terms such as “common vehicle configuration” are interpreted
 - Which changes to a launch vehicle will “substantially affect” the configuration
 - The sufficiency of data provided by the new entrant, and the format in which it will be accepted
 - The order in which certification steps will take place
- Air Force officials acknowledged significant overlap in the certification process employed by each agency, and indicated they are working with NASA and the NRO to share data and avoid unnecessary duplication of efforts for new entrants

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Objective 1

Air Force Implementation of the NECG: Launch Vehicle Risk Classification

- The NECG is closely based on NASA's Policy Directive (NPD) 8610.7, which according to NASA officials was originally released in 1999, and provides a methodology for certifying launch vehicles based on payload risk classifications.
- There are three risk categories of launch vehicles: Categories 1, 2, and 3. Each category is based on the risk associated with that vehicle; Category 1 launch vehicles are considered the highest-risk vehicles, and do not require any previous flights before launching a government payload.
 - In addition to the three vehicle risk categories, there are alternatives within the categories that require varying numbers of successful consecutive launches and levels of government technical evaluation, depending on the risk tolerance of the payload class a vehicle is intended to carry.
- The NECG requires all new entrants to develop a certification plan that will eventually bring their vehicle to a Category 3 certification, meaning it can launch the most-critical, least-risk tolerant payloads.

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Objective 1

Air Force Implementation of the NECG: Payload Risk Classification

- The Air Force plans to use NASA's payload risk evaluation approach, as outlined in NASA's Procedural Requirements 8705.4, which among other things, provides a framework for assigning risk tolerance to payloads based on numerous factors, such as national significance, payload complexity, and cost. Under this framework, payloads can be assigned Class A-D; a payload's class determines the risk category of the vehicle on which it will launch.

| Payload Class | Launch Vehicle Assignment |
|----------------------|--|
| Class A | This class represents the most critical payloads, thus Class A payloads must be launched on the most proven, least risky launch vehicles. Vehicles that launch Class A payloads are the most mature, demonstrated successful launch vehicles |
| Class B, C, D | Payloads outside Class A are considered more tolerant to risk, and can be flown on launch vehicles with a progressively higher risk rating |

- Payloads classified as more tolerant to risk—such as Classes B, C, or D—could provide an opportunity for new entrants to gain experience launching government payloads. However, at this time, according to Air Force officials:
 - Most NSS payloads are considered Class A, and therefore require the most proven launch vehicles, such as those in launch vehicle risk Category 3
 - No Air Force process exists to reassess payload risk classification, potentially limiting opportunities for new entrants to prove their launch vehicle, and subsequently compete for launches. Air Force officials state that work is ongoing to develop a process by which to reassess NSS payload risk classification.

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Objective 1

Air Force Implementation of the NECG: Prerequisites for Certification Outside the NECG

Some new entrant prerequisites have been added that are outside the NECG, and are likely to add time and potentially cost to the new entrant certification process. For example,

- Prior to approval of a certification plan, new entrants must
 - Develop an implementation plan with the Air Force that describes in greater detail the new entrant's timeframes, to be approved by the Air Force.
 - Sign an approved cooperative research and development agreement (CRADA) with the Air Force; Air Force officials said this was a legal mechanism that protects the Air Force and the company's interests, but there are concerns the process could add time to their certification timeline.
- New entrants will be required to integrate payloads with the launch vehicle upright, or vertical, and the payload attached to the vehicle from above, as NSS payloads are currently designed to be vertically integrated.
 - Though not mentioned in the NECG, Air Force officials confirmed that new entrants will be required to vertically integrate payloads, even if the new entrant's launch vehicle was designed to horizontally integrate payloads.
- Senior Air Force officials indicated that even if a payload could be retrofitted to be horizontally mated to the launch vehicle and significant cost savings could be realized by allowing horizontal integration, the requirement for vertical payload integration would stand, as NSS payloads are designed to be vertically mated to the launch vehicle.

Objective 1

Air Force Implementation of the NECG: New Entrants In the Certification Process

| Company | Launch vehicle to be certified | Statement of Intent to certify submitted | Certification plan | Planned certification date |
|---|-----------------------------------|--|-----------------------|-------------------------------|
| Alliant Techsystems, Incorporated (ATK) | Liberty II | Expected March 2013 | TBD | Late 2016 |
| Lockheed Martin | Athena III | May 2012 | Under development | Under development |
| Orbital Sciences Corporation (Orbital) | Antares | June 2012 | In negotiation | 2017-2018 |
| Space Exploration Technologies (SpaceX) | Falcon 9 | February 2012 | In negotiation | Late 2013 |
| SpaceX | Falcon Heavy | June 2012 | In negotiation | Late 2015 |

Source: Company data

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Objective 2

New Entrant Perspectives on Certification

We spoke with the four potential new entrants pursuing launch vehicle certification under the NECG. All four companies said they were satisfied with the NECG and the Air Force's efforts to facilitate launch vehicle certification.

Each noted potential challenges, however, in becoming certified under the NECG to compete for NSS missions. They also perceived advantages afforded to the current sole-source EELV provider. Below are the challenges identified by one or more new entrant, each of which is explained in greater detail on the following slides.

New entrant-identified challenges to certification

- | | |
|---|--|
| 1 | Lack of launch opportunities to foster certification |
| 2 | Unanticipated requirements changes |
| 3 | Minimum 20,000 lb lift requirement to low earth orbit (LEO) |
| 4 | Inflexibility of launch and range site options |

Objective 2

New Entrant Perspectives on Certification: Identified Challenges

Identified challenge #1: Lack of new entrant launch opportunities on the path to certification poses risk to launch vehicle certification schedule

| | |
|--------------------|--|
| Issues to overcome | <ul style="list-style-type: none">Because nearly all NSS missions are Class A, they may not provide an opportunity for new entrants to gain experience on the path to certification; new entrants must meet the most stringent requirements prior to competing for Class A missions.The Air Force made two research missions available to help enable new entrant certification, but the alternatives for a Category 3 launch vehicle require between 2 and 14 successful consecutive flights. The wide range is due to the variable technical oversight required for each alternative; an alternative requiring fewer consecutive flights typically necessitates greater government oversight and technical reviews.Additionally, the Air Force recently made 14 launches available for competition beginning in 2015, but to be eligible to compete for these launches, new entrants must successfully execute the requisite number of non-NSS launches and submit data from their final certification launch. |
| Air Force action | <ul style="list-style-type: none">Air Force officials told GAO that they are currently developing a process to reassess payload risk classifications for NSS payloads, but state that reclassification of NSS missions to reflect increased payload risk tolerance is unlikely for several reasons, including the inherent national significance of NSS missions, and the unintended stigma attached to rendering one mission "less critical" than another.Air Force officials indicate commercial launches will count toward certification, provided the launch vehicle configuration used is identical to the vehicle for which the new entrant is pursuing certification. |

Objective 2

New Entrant Perspectives on Certification: Identified Challenges

Identified challenge #2: Unanticipated requirements changes could impact new entrant vehicle design and certification schedule

| | |
|--------------------|---|
| Issues to overcome | <ul style="list-style-type: none"> In July 2012, the Air Force revised the Standard Interface Specification document (SIS). The SIS provides technical requirements for integration between the payload and the launch vehicle. New entrants were not invited to comment on draft revisions, or the impact those revisions might have on their launch vehicle designs. New entrants are now determining the significance of the SIS revisions to their vehicle design, and the likely effect on their certification schedule. Further, new entrants told us ULA, the current EELV contractor, was involved in developing the SIS revisions, which in some cases reflect current ULA capabilities. New entrants expressed concern that other requirements documents could change without notice, and additional requirements could be added to the certification process, increasing the schedule and potentially adding to the cost of launch vehicle certification. |
| Air Force action | <ul style="list-style-type: none"> Air Force officials told us the SIS revisions would not have a significant impact on new entrants, although they acknowledged that they did not ask or assess what the impact on new entrants would be. Air Force and ULA officials confirmed their joint development of SIS revisions, which in some cases reflect current ULA capabilities. Air Force officials said the System Performance Requirements Document, which governs minimum launch system performance requirements, is currently undergoing revision. They indicated revisions will be made available to new entrants prior to finalization, and that the new entrants will be invited to comment on the changes. Air Force officials acknowledge that certification criteria could change while a new entrant is undertaking certification. For example, the implementation plan and CRADA requirements were recently added, but officials say they will work with new entrants for whom requirements changes may have an impact. |

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Objective 2

New Entrant Perspectives on Certification: Identified Challenges

Identified challenge #3: Minimum 20,000 lb lift requirement to low earth orbit is overly restrictive

| | |
|--------------------|---|
| Issues to overcome | New entrants indicate that this requirement is overly restrictive to their business plans, noting that commercial customers typically do not require this much lift capability; new entrants with no commercial demand for larger launch vehicles would prefer to compete for small and medium NSS payloads, leaving larger NSS payloads to other providers. |
| Air Force action | No action expected; Air Force officials indicated that 20,000 lbs is the low end of current EELV lift capability, and that most NSS payloads for the foreseeable future require this level of lift. Air Force officials acknowledged, however, the possibility that future missions could tend toward smaller satellites that could require less lift capability to launch. |

Identified challenge #4: Inflexibility of launch and range site options could add cost to new entrant baselines

| | |
|--------------------|--|
| Issues to overcome | The NECCG requires new entrants to be able to launch from both the Cape Canaveral Air Force Station in Florida (Cape), and Vandenberg Air Force Base in California (Vandenberg), even if a new entrant has existing alternate East- and West-Coast launch sites. New entrants indicated that building or refurbishing additional launch facilities at the required sites could be costly. It is unclear whether new entrants can wait to invest in new launch sites until they establish a business case for the site. |
| Air Force action | No action expected; Air Force officials indicated that existing sites at locations other than the Cape and Vandenberg were not comparably equipped for NSS launches; for example, they lack the necessary payload integration facilities. |

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Objective 2

New Entrant Perspectives on Certification: Advantages to ULA

In addition to the challenges noted, new entrants identified perceived advantages given to ULA through the EELV program. For example,

- DOD provides about \$1 billion a year to ULA to support its national launch infrastructure, and provides funding to ULA for ongoing engine and other technology development.
- The recent SIS revisions were developed with ULA, and in some cases are tailored to current ULA launch vehicle capabilities. These revisions resulted in minimal impact on ULA vehicle design, but the impact on new entrant vehicles is still unknown. Air Force officials indicate that the SIS revisions were developed over several years, and reflect current NSS mission needs.
- New entrants note that historical criteria for competition in the EELV program were more lenient than those applied to new entrants under the NECG. For example, Boeing and Lockheed Martin were allowed to compete for launch contracts prior to completion of final vehicle designs. Air Force officials acknowledge that criteria to compete for launches were different in the 1990s, noting that the acquisition environment was also different.

Continuing Issues

- In late 2012, the Undersecretary of Defense for Acquisition, Technology, and Logistics signed an Acquisition Decision Memorandum outlining the parameters of an upcoming block buy of launch vehicles from ULA and setting forth opportunities for new entrants to compete for upcoming missions. The Air Force continues to work toward implementing the decisions.
 - The Air Force is currently negotiating a contract with ULA that is expected to cover 5 years of launch services and procure up to 36 launch vehicles.
 - The Air Force has made up to 14 EELV missions available for competition, which represent nearly all NSS launches that could potentially be performed by new entrants, based on capability and readiness assessments. However, if new entrants have not completed all certification launches in time to compete, those launches would also likely be awarded to ULA.
- Some certification decisions that could affect new entrant competition have yet to be finalized. For example, the Air Force is planning to
 - Develop a payload risk classification process over the next year. Though Air Force officials stated that NSS payloads will most likely remain in Class A, there may be science and technology missions that could be classified as more tolerant to risk, thereby providing opportunities for new entrants to gain launch experience and build toward vehicle certification.

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Agency Comments and Our Evaluation

We provided a draft copy of this briefing to the Secretary of Defense for comment in December 2012. In written comments on the draft briefing, DOD raised a concern that we erroneously stated that DOD used a different certification standard for the incumbent provider than will be applied to new entrants. However, the slide in question (slide 18) was correct as it reflects the new entrant perception that the criteria for competition, not certification, were more lenient for the incumbent provider. As a result, no change was made in response to this comment. DOD also provided other technical comments, which were incorporated, as appropriate.

DOD comments are reprinted following the Scope and Methodology section.

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Scope and Methodology

Site visits, interviews, and information obtained from:

- Air Force Space Command headquarters, Peterson Air Force Base, Colorado Springs, Colorado
- Air Force Space and Missile Systems Center, Launch and Range Directorate, Los Angeles Air Force Base, El Segundo, California
- Defense Contract Management Agency, various locations
- Department of Defense, Under Secretary for Acquisition, Technology and Logistics, Space and Intelligence Office, Arlington, Virginia
- Department of Defense, Office of Inspector General, Alexandria, Virginia
- National Aeronautics and Space Administration headquarters, Washington, District of Columbia
- National Reconnaissance Office, Chantilly, Virginia
- Office of the Secretary of Defense, Cost Assessment and Program Evaluation, Washington, District of Columbia
- Program Executive Officer for Space Launch, Washington, District of Columbia
- Secretary of the Air Force, Acquisition Directorate of Space Programs, Arlington, Virginia
- The Aerospace Corporation, El Segundo, California
- United Launch Alliance, Centennial, Colorado

Site visits and interviews with potential new entrants:

- Alliant Techsystems, Incorporated, Aerospace Systems Division, Magna, Utah
- Lockheed Martin Commercial Launch Services, Denver, Colorado
- Orbital Sciences Corporation, Huntington Beach, California
- Space Exploration Technologies Corporation, Hawthorne, California

Scope and methodology, cont.

To determine how the Air Force plans to implement its New Entrant Certification Guide (NECG):

- We reviewed relevant documents, including the NECG; EELV Acquisition Strategy; Coordinated Strategy Among the Air Force, NASA, and the NRO; NASA policy documents referenced in the NECG; and Air Force documentation germane to implementation plans.
- We identified and reviewed current EELV requirements, including the Standard Interface Specification and Operational Requirements Document, to identify additional launch vehicle requirements with which new entrants must comply in order to achieve certification.
- We interviewed top Air Force and industry officials to discuss implementation plans and preliminary observations.
- We interviewed NASA officials on their launch vehicle certification and payload classification policies to determine key differences between Air Force and NASA processes.
- We assessed the extent to which coordination is occurring among the Air Force, NASA, and NRO, through interviews with officials at the three agencies.
- We compared current and historical requirements to determine the extent to which current requirements are more stringent or flexible.
- We reviewed future launch manifests to determine if the requirements contained within the Guide are reasonable given the expected needs of future NSS payloads.

Scope and methodology, cont.

To determine new entrant perspectives in becoming certified under the NECG:

- We interviewed all four companies identified by the Air Force as potential new entrants to obtain perspectives on certification challenges and discuss questions they had on the NECG and the launch vehicle certification process. In order to properly safeguard proprietary data, we summarized their responses and reflected an aggregate response in our briefing.
- We also analyzed current EELV requirements documents to identify potential issues for the new entrants, and discussed these observations with representatives from each company and relevant Air Force officials.
- We provided a draft copy of this briefing to each new entrant. They submitted technical comments, which were incorporated as appropriate.

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Scope and methodology, cont.

We conducted this performance audit from October 2012 to February 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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Enclosure II: Comments from the Department of Defense



THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

JAN 24 2013

Ms. Christina Chaplain
Director
Acquisition and Sourcing Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. Chaplain:

Thank you for the opportunity to review the U.S. Government Accountability Office briefing to the Defense Committees on the Air Force Launch Services New Entrant Certification Guide as directed in the House Report accompanying the National Defense Authorization Act for Fiscal Year 2013.

I am committed to obtaining the benefits of competition in the Evolved Expendable Launch Vehicle (EELV) program at the earliest opportunity. To accomplish this, I directed the Air Force to aggressively introduce competition into the EELV program by competing up to 14 launch services before FY 2020, if emerging new entrants have the required launch capability on a schedule to support all or some of these launches. The Air Force's implementation of its New Entrant Certification Guide (NECG) provided the opportunity to compete these launch services.

In line with our demonstrated efforts to encourage competition in the EELV program, I request you consider revising your briefing in the following areas:

- The presentation erroneously states that the Department of Defense used a different certification standard for the incumbent provider than will be applied to new entrants (page 18). The NECG includes a certification path identical to the one used by the current provider.
- The presentation states that the Department has yet to determine if launch vehicle certification is required prior to allowing a new entrant to compete for launch contract awards (page 19). The Department will allow new entrants to compete for launch contract awards as soon as the new entrant delivers the data from their final certification launch.
- For completeness, the discussion of the 14 launches that are reserved for competition (page 19) should mention that these opportunities represent all of the feasible National Security Space launches that the new entrant providers can fulfill according to their own assessment of their capability and readiness. In other words, the Department has awarded nothing to the incumbent provider for which a potential new

entrant could compete except two launches where the total cost to the Government would greatly exceed the savings from competition.

Additional recommendations to improve the clarity of the presentation are provided for consideration in the enclosure. My point of contact for this response is Colonel Carolyn Campbell at 703-692-6249 or Carolyn.Campbell@osd.mil.



Frank Kendall

Enclosure:
As stated

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